

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 March 2005 (03.03.2005)

PCT

(10) International Publication Number
WO 2005/019424 A2

- (51) International Patent Classification⁷: **C12N**
- (21) International Application Number:
PCT/US2004/026787
- (22) International Filing Date: 18 August 2004 (18.08.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/496,333 18 August 2003 (18.08.2003) US
- (71) Applicant (for all designated States except US):
WRIGHT STATE UNIVERSITY [US/US]; 3640
Colonel Glenn Highway, Dayton, OH 45435 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **WOOLEY, Dawn,**

Patricia [US/US]; 3705 Fincastle Drive, Beavercreek, OH 45431 (US). **HUANG, Kelly, Jo** [US/US]; 5620 Lexington Green Place, Centerville, OH 45459 (US).

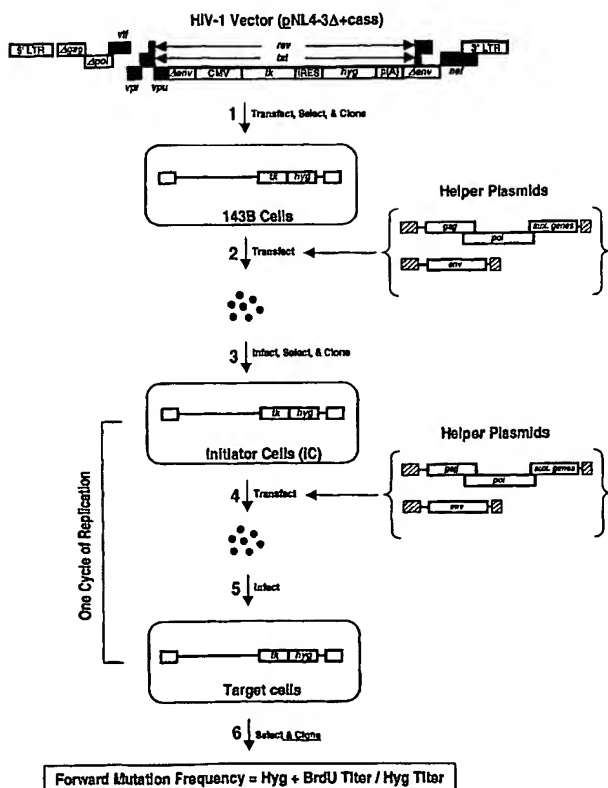
(74) Agents: **HAGAN, Timothy, W.** et al.; Dinsmore & Shohl LLP, One Dayton Centre - Suite 1300, One South Main Street, Dayton, OH 45402-2023 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: **RETROVIRAL VECTOR AND CELL-BASED ASSAY FOR MEASURING THE MUTATION RATE OF RETROVIRUSES EMPLOYING SAME**



(57) Abstract: Lentiviral-based retrovirus vectors and an in vivo mutation rate assay employing them. More particularly, an assay for directly determining the in vivo mutation rate of HIV-1.



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.